Before the

FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of Emergency Communications by Amateur Radio and Impediments to Amateur Radio Communications	))))	GN Docket No. 12-91

REPLY COMMENTS OF
Penny Rubow, Arkansas Statewide Interoperability Coordinator
and State ESF#2 Team Member

Background

As requested by the Commission in the Public Notice, the basis for these remarks is the requirement for the Commission to "complete a study on the uses and capabilities of Amateur Radio Service communications in emergencies and disaster relief." Response to this request will provide information on the importance of emergency Amateur Radio Service communications. Information for this response has been solicited from Amateur Radio operators and the Emergency Support Function #2 team for the State of Arkansas.

Arkansas is located in the infamous "Tornado Alley". Arkansas averages 21 tornados each year and is ranked number 2 in the nation for risk of death from a tornado. Ice storms are prevalent in the northern tier of counties; power outages and property damage causing the greatest impact to the population. The New Madrid Seismic Zone extends from southern Missouri to northeastern Arkansas. It has the potential to produce damaging earthquakes and the possibility of a large earthquake in densely populated areas of the State is recognized by scientists and government officials.

Comments - Importance of emergency Amateur Radio Service communications

a. *What are examples of disasters, severe weather, and other threats to life and property in which the Amateur Radio Service provided communications services that were important to emergency response or disaster relief? Provide examples of the important benefits of these services.*

As noted above, Arkansas has no shortage of natural disasters to contend with. In the last few years emergency management officials have come to rely on the Amateur Radio Community for communications support. We recognize that Amateur Radio Services are a critical tool in the public safety communications tool kit. The benefits that Amateur Radio Services bring to emergency communications are:

- Ability to fill gaps that may be present in existing LMR systems
- Rapid deployment
- In operations 24 hours a day, making calls for support efficient and effective
- Operators keep their equipment on-hand, maintained and ready to go

Below are a few examples of the type of response and service these volunteers bring to disaster response.

- January 22, 2012 - Strong winds and tornadoes moved through Arkansas and Alabama. In response to the storms, the National Weather Service (NWS) office in Little Rock activated Arkansas SKYWARN (program of the NWS that collects reports on local weather via a network of Amateur Radio operators) that afternoon. By 6 PM, the Arkansas SKYWARN net control team was in place and the NWS issued the first tornado warning for the area. The Arkansas SKYWARN team worked through the evening to provide reports to the NWS. The NWS received reports of tornadoes in Arkansas, Dallas, Lonoke, Prairie and Cleveland Counties. Because the Amateur Radio operators that work with SKYWARN are well trained and could respond quickly, citizens in these counties were notified well in advance of the dangerous weather, and it is likely many lives were saved.
- April 28, 2011 - Violent storms swept through Alabama, Mississippi, Arkansas and North Carolina and Amateur Radio operators were called on to help provide communications support and real-time weather observations. In Arkansas, SKYWARN personnel were active in the NWS office in North Little Rock. These volunteers were instrumental in gathering and reporting weather information. During a period of four or five hours beginning in the afternoon and ending just after nightfall, the area around Little Rock was hit by what weather officials believe were several large tornadoes. Most significantly, a tornado tore through a small Arkansas town -- Vilonia -- located about 40 miles north of

Little Rock. Again, thanks to the efforts of the Amateur Radio operators loss of life during this tornado outbreak was kept to a minimum.

- June 11, 2010 - In the early hours of the morning, as many as 300 campers were taken unawares when between 6 and 10 inches of rain fell in the rugged Ouachita Mountains. These heavy rains caused the normally quiet Caddo and Little Missouri rivers to flood during the night. Around dawn, floodwaters barreled into the Albert Pike Recreation Area, a 54-unit campground in the Ouachita National Forest, about 75 miles west of Little Rock, Arkansas. The ensuing damage left behind by the flash flood was akin to the destruction caused by a tornado. Cars were wrapped around trees and clothing could be seen scattered across several campsites. The Pike County Sherriff requested the assistance of Amateur Radio operators to assist with search and rescue operations, as well as communications support, at the site. By late morning an emergency had been declared and Emergency Support Function 2 (Communications) was activated. The Arkansas Department of Information Services (DIS) and the Arkansas Wireless Information Network (AWIN, the statewide P25 digital trunked radio system on 700/800 MHz) reached out to the amateur radio community. Because of the terrain and the remote region the camp ground was in, the AWIN reception was limited at best and communication support for the search and rescue teams was critical. The amateur radio community put together ham operators capable of strenuous duty and matched them with search teams that did not have communications. Volunteers came from Arkansas, Texas, Louisiana, Oklahoma, and Virginia. Because of the outpouring of support from the volunteer community, the search effort was handled efficiently and all campers were accounted for by the following Monday.

b. *Under what circumstances does the Amateur Radio Service provide advantages over other communications systems in supporting emergency response or disaster relief activities? Under what circumstances does the Amateur Radio Service complement other forms of communications systems for emergency response or disaster relief?*

Amateur Radio Service operators have proven that they can provide efficient and effective communications under a variety of circumstances. Amateur Radio is not better or worse than other types of communication; it is a critical tool in the tool kit.

Amateur Radio can be rapidly deployed as demonstrated by all three examples above. In the example of the campground flood, commercial telecom providers and the State's team were not able to deploy Cells on Wheels (COW – provides support for cell phone users) and Sites on Wheels (SOW – provides support for LMR users) until the next morning. Amateur operators were able to deploy and provide support in a matter of a few hours of the event, providing much needed support to the teams working the event. As the response and recovery effort unfolded, the Amateur Radio teams could support the search and rescue teams, the State LMR system was used to coordinate the command and control aspect of the event, and the campers had use of the commercial phone system for contacting their families and friends.

c. *What Federal Government plans, policies, and training programs involving emergency response and disaster relief currently include use of the Amateur Radio Service? What additional plans, policies, and training programs would benefit from the inclusion of Amateur Radio Service operations? How would Amateur Radio Service operations fit into these plans and programs?*

d. *What State, tribal, and local government plans, policies, and training programs involving emergency response and disaster relief currently include use of the Amateur Radio Service? What additional plans and programs would benefit from the inclusion of Amateur Radio Service operations? How would Amateur Radio Service operations fit into these plans and programs?*

Planning and Policy -- Amateur Radio is represented in two positions on the Arkansas Interoperable Communications Committee (AICC). While the AICC is a State entity, it is developed along guidelines provided by the Department of Homeland Security, Office of Emergency Communications (DHS/OEC). By having a "seat at the table" the Amateur Radio operators are active in developing the Statewide Communications Interoperability Plan (SCIP)

and policies and process that effect emergency communications in the State. The Amateur Radio operators on the AICC have been instrumental in implementing and installing the Military Affiliate Radio Service (MARS) equipment in participating state agencies as well as providing training on the system.

Training -- The State has hosted two Communications Unit Leader (COM-L) classes and one COM-L Train the Trainer class. COM-L and Com-L Train the Trainer classes are offered through Federal Emergency Management Agency (FEMA). All three classes had attendees that were Amateur Radio operators. The Amateur Radio operators in Arkansas were included in the planning, preparation and execution of the National Level Exercise (NLE) 2011. Finally, the NWS works with the Amateur Radio operators by providing SKYWARN training sessions throughout the US.

g. What communications capabilities, e.g., voice, video, or data, are available from Amateur Radio Service operators during emergencies and disasters? Are there any future technical innovations that might further improve the Amateur Radio Service?

Amateur Radio operators can currently use a system called WinLink to send limited e-mail traffic. WinLink is a global messaging system that uses the internet to transport amateur radio messages. The system can support email with attachments. WinLink was used during NLE2011 to send and receive messages.

i. Would it enhance emergency response and disaster relief activities if Amateur Radio Service operators were able to interconnect with public safety land mobile radio systems or hospital and health care communications systems? What could be done to enable or enhance such interconnections? What issues could arise from permitting such interconnections?

Emergency Communications could be enhanced by allowing Amateur Radio Service operators to interconnect, as needed and as authorized, to public safety LMR systems.

j. Should there be national certification programs to standardize amateur radio emergency communications training, mobilization, and operations? How would such programs improve emergency communications?

A training and certification program for Amateur Radio operators who want to volunteer during emergencies would be useful in enhancing the effectiveness of their efforts. A training and certification program could go a long way to establish credibility in the public safety community.

Summary

The State of Arkansas has benefitted from having the assistance and support of the Amateur Radio community during emergencies. These emergency response volunteers have demonstrated the value and benefit that they can provide to the public safety community and the citizens of the State.

Respectfully submitted this 17th day of May, 2012

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